

ABSTRACT

Electrolytic solution which contains sulfuric acid and is stored in an electrolytic solution storage 2 of a case 3 is caused to be retained in an electrolytic solution retainer 25. A reference electrode 18 and a counter electrode 19 are printed on the underside of the electrolytic solution retainer 25. The reference electrode 18, the counter electrode 19, and the electrolytic solution retainer 25 are thus formed into a single component, with the reference electrode 18 and the counter electrode 19 being formed simultaneously. Electrode pins 32,33,34 are brought into contact with the reference electrode 18, the counter electrode 19, and a detection electrode 17. The electrode pins 32,33,34 are made of tantalum. A contact portion 32b,33b,34b and a lead portion 32a,33a,34a of each electrode pin 32,33,34 are formed as a seamless, integral body.